

Amendments to the Claims

This listing of the claims will replace all prior versions and listings of the claims in the application.

1. (previously presented) A method of performing server-side processing of postback input received from a client and associated with a client-side user interface element, the method comprising:

examining the postback input received from the client to determine an identifier of a target server-side control object;

identifying the target server-side control object based on the identifier of the target server-side control object;

passing the postback input received from the client to the target server-side control object; and

processing the postback input received from the client and passed to the target server-side control object.

2. (original) The method of claim 1 wherein the processing operation comprises changing a property of the target server-side control object; and further comprising:

generating authoring language data from the target server-side control object based on the property to define the client-side user interface element for transmission to the client.

3. (original) The method of claim 1 wherein the processing operation comprises raising a server-side event from the target server-side control object; and further comprising:

1 generating authoring language data from the target server-side control
2 object based on the server-side event to define the client-side user interface
3 element for transmission to the client.

4 4. (original) The method of claim 2 further comprising:
5 creating a plurality of server-side control objects in a server-side control
6 object hierarchy, prior to the operation of processing the postback input; and
7 terminating the plurality of server side control objects, after the operation of
8 generating authoring language data.

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10 5. (original) The method of claim 2 further comprising:
11 searching for the target server-side control object in a server-side control
12 hierarchy based on the identifier;
13 creating the target server-side control object in the server-side control
14 hierarchy, if the target server-side control object is not found by the searching
15 operation; and
16 terminating the server-side control hierarchy, after the operation of
17 generating authoring language data.

18 6. (original) The method of claim 1 wherein the identifier has a
19 hierarchical identifier structure indicating a plurality of levels in a server-side
20 control object hierarchy including a plurality of member server-side control
21 objects, and the operation of identifying the target server-side control object
22 comprises:

23 extracting a node level identifier from the identifier;
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1 passing the node level identifier to a member server-side control object
2 corresponding to the node level identifier;

3 identifying the member server-side control object as the target server-side
4 control object, if the node level identifier identifies a leaf node of the identifier;

5 extracting a next node level identifier from the identifier of the target
6 server-side control object, if the node level identifier does not identify a leaf node
7 of the identifier, wherein the next node level identifier identifies a child server-
8 side control object of the member server-side control object; and

9 performing recursively the passing and identifying operations and the
10 operation of extracting a next node level identifier using the next node level
11 identifier as the node level identifier and the child server-side control object as the
12 member server-side control object, if the node level identifier does not identify a
13 leaf node of the identifier.

14 7. (original) The method of claim 1 wherein the operation of
15 processing the postback input comprises:

16 storing a postback data value as a property the target server-side control
17 object.

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19 8. (original) The method of claim 7 wherein the target server-side
20 control object initially stores an old data value as a property, and the operation of
21 storing a postback data value comprises:

22 associating the postback data value with the property;

23 indicating a data change associated with the target server-side control
24 object, if the postback data value passed to the target server-side control object is
25 different than the old data value of target server-side control object; and

1 replacing the old data value with the postback data value in the target
2 server-side control object.

3 9. (original) The method of claim 8 further comprising:
4 raising a server-side data change event after the operation of replacing of
5 the old data value, if a data change is indicated.

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7 10. (original) The method of claim 7 wherein the target server-side
8 control object is one of a plurality of member server-side control objects in a
9 server-side control object hierarchy, and the operation of storing a postback data
10 value comprises:

11 storing postback data values for all of the member server-side control
12 objects in the server side control object hierarchy; and

13 raising at least one server-side data change event after the operation of
14 storing a postback data value for all member server-side control objects, if at least
15 one data change is indicated.

16 11. (original) The method of claim 10 further comprising:
17 receiving the server-side data change event from the target server-side
18 control object; and

19 invoking a function of a non-user-interface server component, based on the
20 server-side data change event.

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22 12. (original) The method of claim 1 wherein the operation of
23 processing the postback input comprises:

24 processing a postback event using the target server-side control object.
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1 13. (original) The method of claim 12 wherein the operation of
2 processing a postback event comprises:

3 extracting from the postback input a postback event argument associated
4 with the identifier;

5 passing the postback event argument associated with the identifier to the
6 target server-side control object; and

7 processing the postback event argument using the target server-side control
8 object.

9 14. (original) The method of claim 13 wherein the operation of
10 processing a postback input further comprises:

11 raising a server-side event from the target server-side control object,
12 responsive to the operation of processing the postback event argument.

13 15. (original) The method of claim 14 further comprising:

14 receiving the server-side event from the target server-side control object;
15 and
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17 invoking a function of a non-user-interface server component, based on the
18 server-side event.

19 16. (previously presented) A computer data signal embodied in a carrier
20 wave by a computing system and encoding a computer program for executing a
21 computer process performing server-side processing of postback input received
22 from a client and associated with a client-side user interface element, the computer
23 process comprising:
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1 examining the postback input received from the client to determine an
2 identifier of a target server-side control object;

3 identifying the target server-side control object based on the identifier of
4 the target server-side control object;

5 passing the postback input received from the client to the target server-side
6 control object; and

7 processing the postback input received from the client and passed to the
8 target server-side control object.

9 17. (previously presented) A computer program storage medium
10 readable by a computer system and encoding a computer program for executing a
11 computer process performing server-side processing of postback input received
12 from a client and associated with a client-side user interface element, the computer
13 process comprising:

14 examining the postback input received from the client to determine an
15 identifier of a target server-side control object;

16 identifying the target server-side control object based on the identifier of
17 the target server-side control object;

18 passing the postback input received from the client to the target server-side
19 control object; and

20 processing the postback input received from the client and passed to the
21 target server-side control object.

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23 18. (original) A computer program product for processing postback
24 input received from a client and associated with a client-side user interface
25 element, the computer process comprising:

1 creating a plurality of server-side control objects in a server-side control
2 object hierarchy, the server-side control object hierarchy including a target server-
3 side control object associated with the client-side user interface element;

4 passing the postback input to the target server-side control object;

5 processing the postback input received by target server-side control object;

6 and

7 generating authoring language data from the plurality of server-side control
8 objects to define a web page for display on a client.

9 19. (original) The computer program product of claim 18 wherein the
10 computer process further comprises:

11 receiving an identifier associated with the target server-side control object;

12 and

13 identifying the target server-side control object within the server-side
14 control object hierarchy, based on the identifier.

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16 20. (original) The computer program product of claim 18 wherein the
17 computer process further comprises:

18 terminating the plurality of server side control objects, after the operation of
19 generating authoring language data.

20 21. (previously presented) A method comprising:

21 examining input data received from a client to identify a corresponding
22 target server-side control object, the input data being associated with a client-side
23 user interface element; and
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1 passing the input data to the identified target server-side control object to
2 process the input data.

3 22. (previously presented) A computer program product embodied on a
4 computer program storage medium readable by a computer system for executing a
5 computer process, the computer process comprising:

6 examining input data received from a client to identify a corresponding
7 target server-side control object, the input data being associated with a client-side
8 user interface element; and

9 passing the input data to the identified target server-side control object to
10 process the input data.

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12 23. (previously presented) A computer system comprising:

13 a plurality of server-side control objects in a server-side control object
14 hierarchy on a server, the server-side control object hierarchy including a target
15 server-side control object associated with a client-side user interface element on a
16 client, such that input data received by the server from the client-side user
17 interface element is passed within the server to the target server-side control object
18 in the server-side control object hierarchy; the plurality of server-side control
19 objects generating authoring language data to define a web page for display on the
20 client.

21 24. (previously presented) A computer program product embodied in a
22 computer readable medium for executing a computer process, the computer
23 process comprising:

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1 generating authoring language data from a plurality of server-side control
2 objects at a server to define a page for display on a client, the authoring language
3 data including a script that is tagged to be executed by the server to process input
4 data received from the client.

5 25. (previously presented) The computer program product of claim 24,
6 wherein each server-side control object corresponds to a client-side user interface
7 element.

8 26. (previously presented) A method comprising:
9 generating authoring language data from a plurality of server-side control
10 objects at a server to define a web page for display on a client, the authoring
11 language data including a script that is tagged to be executed by the server to
12 process input data received from the client.

13 27. (previously presented) A method comprising:
14 receiving input data from the client at the server, the input data being
15 associated with an individual client-side user interface element on the client;
16 generating a hierarchy of server-side control objects on a server, each
17 server-side control object corresponding to a client-side user interface element on
18 a client;
19 identifying a server-side control object in the hierarchy to which the
20 individual client-side user interface element corresponds; and
21 processing the input data using the identified server-side control object.

22 28. (previously presented) The method of claim 27 wherein the
23 processing operation comprises:
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1 setting a property value of the identified server-side control object based on
2 the input data.

3 29. (previously presented) The method of claim 27 wherein the
4 processing operation comprises:

5 raising an event in the identified server-side control object based on the
6 input data.

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8 30. (previously presented) The method of claim 27 further comprising:
9 generating authoring language data from a plurality of server-side control
10 objects at a server to define a page for display on the client, the page including the
11 individual client-side user interface element.

12 31. (previously presented) The method of claim 27 further comprising:
13 generating authoring language data from a plurality of server-side control
14 objects at a server to define a page for display on the client, the authoring language
15 data including a script that is tagged to be executed by the server to process input
16 data received from the client.

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18 32. (previously presented) A computer program product embodied in a
19 computer readable medium for executing a computer process, the computer
20 process comprising:

21 receiving input data from the client at the server, the input data being
22 associated with an individual client-side user interface element on the client;

23 generating a hierarchy of server-side control objects on a server, each
24 server-side control object corresponding to a client-side user interface element on
25 a client;

1 identifying a server-side control object in the hierarchy to which the
2 individual client-side user interface element corresponds; and

3 processing the input data using the identified server-side control object.

4 33. (previously presented) The computer program product of claim 32
5 wherein the processing operation comprises:

6 setting a property value of the identified server-side control object based on
7 the input data.

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9 34. (previously presented) The computer program product of claim 32
10 wherein the processing operation comprises:

11 raising an event in the identified server-side control object based on the
12 input data.

13 35. (previously presented) The computer program product of claim 32
14 wherein the computer process further comprises:

15 generating authoring language data from a plurality of server-side control
16 objects at a server to define a page for display on the client, the page including the
17 individual client-side user interface element.

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19 36. (previously presented) The computer program product of claim 32
20 wherein the computer process further comprises:

21 generating authoring language data from a plurality of server-side control
22 objects at a server to define a page for display on the client, the authoring language
23 data including a script that is tagged to be executed by the server to process input
24 data received from the client.
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1 37. (previously presented) A method comprising:
2 creating a plurality of server-side control objects in a server-side control
3 object hierarchy, the server-side control object hierarchy including a target server-
4 side control object associated with the client-side user interface element;
5 passing the input data to the target server-side control object;
6 processing the input data received by target server-side control object; and
7 generating authoring language data from the plurality of server-side control
8 objects to define a web page for display on a client.

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